

Domain Assessment

Ratios and Proportional Relationships Answer Key

Item	Answer	Common Core State Standards	Level*	Common Core Coach Lesson
1	A	6.RP.1	1	Lesson 1
2	B	6.RP.1	1	Lesson 1
3	C	6.RP.2	1	Lesson 2
4	B	6.RP.1	1	Lesson 1
5	D	6.RP.2, MP1	2	Lesson 2
6	C	6.RP.3.b	2	Lesson 4
7	A	6.RP.3.c, MP6	1	Lesson 5
8	B	6.RP.3.b	2	Lesson 4
9	C	6.RP.3.d	2	Lesson 6
10	D	6.RP.2	2	Lesson 2
11	A	6.RP.3.a	2	Lesson 3
12	A	6.RP.3.a	2	Lesson 3
13	D	6.RP.3.d	2	Lesson 6
14	C	6.RP.3.a, MP2	2	Lesson 3
15	C	6.RP.3.a, MP4	2	Lesson 3
16	A	6.RP.3.b	2	Lesson 4
17	B	6.RP.3.b	2	Lesson 4
18	C	6.RP.3.b	2	Lesson 4
19	C	6.RP.3.c	2	Lesson 5
20	A	6.RP.3.d, MP1	3	Lesson 6
21	See scoring rubric.	6.RP.3.c	2	Lesson 5
22	See scoring rubric.	6.RP.2	3	Lesson 2
23	See scoring rubric.	6.RP.3.c, MP3	3	Lesson 5
24	See scoring rubric.	6.RP.3.a, MP4	3	Lesson 3
25	See scoring rubric.	6.RP.3.b	3	Lesson 4

* Levels according to Webb's Depth of Knowledge

21. \$1,450
 40% of the whole is 580, so 10% of the whole is 145. The whole is 1,450.
 (Students may draw tape diagrams.)

Use the 2-point rubric below to grade student work.

- 2 Student has shown a complete and correct response, as shown above.
- 1 Student may have shown a correct process for solving the question but made an error in calculation.
- 0 Student has shown little or no understanding of percents.

22. $\frac{1}{2}$ tablespoon

For every 16 tablespoons of lime juice, 8 tablespoons of honey are needed. So for every 2 tablespoons of lime juice, 1 tablespoon of honey is needed. The recipe calls for $\frac{1}{2}$ tablespoon of honey for every tablespoon of lime juice.

Use the 2-point rubric below to grade student work.

- 2 Student has shown a complete and correct response, as shown above.
- 1 Student may have shown a correct response but failed to provide a reasonable explanation.
- 0 Student has shown little or no understanding of unit rates.

23. A. Dorian's claim is not reasonable because the total number of votes cannot be less than the number of votes received by the losing candidate.

- B. 34,000 total voters

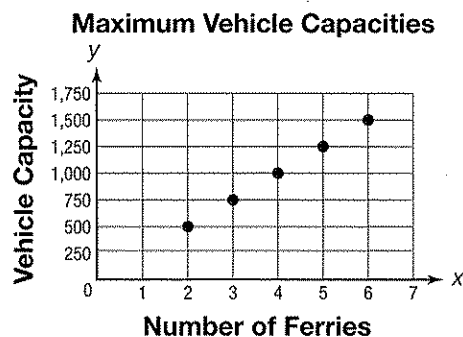
30% of the whole is 10,200, so 10% of the whole is 3,400. The whole is 34,000.

(Students may draw tape diagrams.)

Use the 4-point rubric below to grade student work.

- 4 Student has shown complete and correct responses, as shown above.
- 3 Student may have answered both parts of the question correctly but failed to provide a reasonable explanation for the second part of the question.
- 2 Student may have answered the first part of the question correctly and provided a reasonable explanation for the second part of the question but did not provide a correct answer due to calculation errors.
- 1 Student may have answered the second part of the question correctly but did not provide a reasonable explanation for either part.
- 0 Student has shown little or no understanding of percents.

24. A. The maximum vehicle capacity for 6 ferries is 1,500 vehicles.



- B. 250 vehicles per ferry

The table shows a ratio of 500 vehicles to 2 ferries. $\frac{500}{2} = \frac{250}{1}$

The unit rate is $\frac{250 \text{ vehicles}}{1 \text{ ferry}}$ or 250 vehicles per ferry.

Use the 4-point rubric below to grade student work.

- 4 Student has shown complete and correct responses, as shown above.
- 3 Student may have correctly plotted all points and found the unit rate but failed to provide a reasonable explanation for the second part of the question.
- 2 Student may have correctly plotted the points in the table and found the unit rate but failed to plot the missing value in the table and provide a reasonable explanation for the second part of the question.
- 1 Student may have found the unit rate but failed to plot the points and provide a reasonable explanation for the second part of the question.
- 0 Student has shown little or no understanding of ratios, unit rates, and graphs.

25. A. \$7.45

Let p represent the unit price. $3 \times p = 4.47$

$$p = 4.47 \div 3 = 1.49$$

Ashmead's Kernel apples at the McDougal Orchards stand cost \$1.49 per pound.

$$5 \times 1.49 = 7.45$$

B. McDougal Orchards

The unit price for Ashmead's Kernel apples at Brannen's Orchards is \$1.53 per pound because $6.12 \div 4 = 1.53$. That unit price is greater than the unit price of \$1.49 per pound at McDougal Orchards.

Use the 4-point rubric below to grade student work.

- 4 Student has shown complete and correct responses, as shown above.
- 3 Student may have answered both parts of the question correctly but failed to provide a reasonable explanation for the second part of the question.
- 2 Student may have shown the correct process for answering both parts of the question but, due to errors in calculation, only answered one part correctly.
- 1 Student may have failed to answer either part of the question correctly, due to calculation errors, but has shown the correct process each time.
- 0 Student has shown little or no understanding of unit prices.